## Message

From: Newton, Cheryl [Newton.Cheryl@epa.gov]

Sent: 7/26/2016 1:24:03 PM

To: Nam, Ed [nam.ed@epa.gov]; Braverman, Carole [braverman.carole@epa.gov]

CC: Sanders, Amy [Sanders.Amy@epa.gov] Subject: FW: Article on subjective evaluation of data.

Attachments: precisionmeasure3001kuha.pdf

FYI - I called Jesse last Friday on my way home as I hadn't heard from him regarding his transition back to R5 from his HQ detail. Jesse still feels very strongly there are issues with the monitoring program and how data is being evaluated and/or dismissed. He offered to share this document to help explain some of his concerns. We can chat more this morning. Thanks

----Original Message----

From: McGrath, Jesse

Sent: Friday, July 22, 2016 5:47 PM
To: Newton, Cheryl <a href="Newton.cheryl@epa.gov">Newton.cheryl@epa.gov</a>>

Subject: Article on subjective evaluation of data.

The paper is on page 346. Sorry I couldn't extract just that article from the compendium, and the single article is not available with EPA access.

It's 2-and-some pages long but an easy read.

Our data often falls into what he calls "case c" and the message from the region is to simply invalidate it. He offers advice on a statistical test, and I would accept that. In fact I encourage it, but can't get support because people just want to invalidate, and because they view that as difficult. I find that a weak excuse; it's our job. It would be best if we paid enough attention that we didn't get into these situations so frequently.

My main message here is that evaluating data requires you to understand how and why you're measuring something rather than just if it meets some threshold. You can use thresholds to help show when to look, but they don't decide whether something is "good" or "bad".

And for where air monitoring stands; the better analogy is that we need all the bombs. If things are falling off-target you don't invalidate it, you fix the problem so that it lands on-target.

Thank you, Jesse